



(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



25 APR 2505:

(43) International Publication Date 6 May 2004 (06.05.2004)

PCT

(10) International Publication Number WO 2004/037321 A2

(51) International Patent Classification7:

A61M

(21) International Application Number:

PCT/US2003/034283

(22) International Filing Date: 27 October 2003 (27.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/421,394

25 October 2002 (25.10.2002) US

- (71) Applicant (for all designated States except US): UNI-VERSITY OF CONNECTICUT HEALTH CENTER [US/US]; 263 Farmington Avenue, Farmington, CT 06030-5355 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SRIVASTAVA, Pramod, K. [IN/US]; 70 Pheasant Run, Avon, CT 06001 (US).
- (74) Agent: ANTLER, Adriane, M.; Jones Day, 222 East 41st Street, New York, NY 10017-6702 (US).

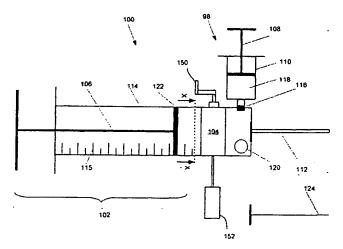
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS AND METHOD FOR IMMUNOTHERAPY OF A CANCER THROUGH CONTROLLED CELL LYSIS



(57) Abstract: The treatment device includes an extraction mechanism, configured to extract a tissue sample from a patient or a tumor, coupled to a lysis mechanism. The lysis mechanism is configured to induce lysis of the tissue sample into a lysed tissue sample. The treatment device also includes an administration mechanism that is coupled to both the extraction mechanism and the lysis mechanism. Further included with the treatment device is an additive mechanism configured to add an additive solution to the lysed tissue sample before the lysed tissue sample is administered to the patient. Furthermore, the invention also provided a method for treating a cancer. The method includes the steps of extracting a tissue sample from a patient or a tumor into a chamber of a treatment device. Lysing the tissue sample into an laysed tissue sample within the chamber of the treatment device and administering the lysed tissue sample directly from the treatment device into the patient.

VO 2004/037321 A2